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## India

# **Sugar Annual**

# 2012

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### **Report Highlights:**

Indian sugar production is poised to increase to 29.8 million metric tons (raw value basis) in marketing year (MY) 2012/13 (October-September) due to an expected increase in sugarcane production. Anticipating surplus sugar production and strong export demand for 2012/13, India will continue to be a net exporter of sugar for second consecutive year, with exports likely to reach as much as 2.5 million tons. Continued strong demand from bulk consumers will push sugar consumption to 26.5 million tons.

Note: All sugar data in the report are raw value basis unless otherwise mentioned.

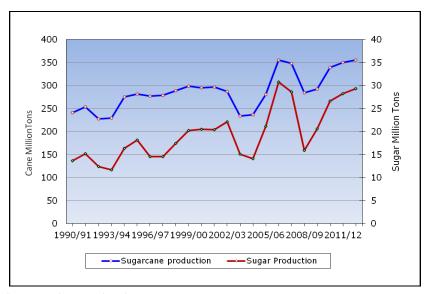
#### **Commodities:**

Sugar, Centrifugal

#### **Production:**

Sugar production is poised for a third consecutive year of strong growth (marketing year <sup>[1]</sup> 2012/13 <sup>[2]</sup>) after moving through a downward cycle in 2008/09and 2009/10. India's total centrifugal sugar production in 2012/13 is forecast at 29.75 million metric tons, <sup>[3]</sup> which includes 435,000 tons of Khandsari sugar, (a low recovery centrifugal sugar prepared by open-pan evaporation method), due to an expected increase in sugarcane planting and yields. 2012/13 gur production (a crude non-centrifugal lump sugar) is forecast higher at 4.4 million tons due to the expectation of firm prices.

Figure 1. India: Sugarcane and Sugar Production



Source: Industry and trade source

Modest-to-strong cane price realization despite weak sugar prices in domestic markets, coupled with strong export prospects for Indian sugar in 2011/12, will likely help mills increase cash flows and avoid mounting cane arrears. [4] This should incentivize farmers to plant higher cane acreage in 2012/13. Assuming a normal monsoon and favorable weather conditions, sugarcane planting are forecast at 5.25 million hectares, (up 3 percent over last year), and sugarcane production is forecast higher at 365 million tons. However, deficit northeast monsoon rains in the 2012 rabi season have raised concerns over accumulating moisture stress in southern and western India, which may temper cane production prospects for 2012/13.

With the rising cost of labor and irrigation for sugarcane cultivation, the Maharashtra state government is assisting sugarcane farmers in procuring sugarcane harvesters. (See <u>GAIN Report IN2041</u> for more information on this program). Industry observers believe that mechanical cane harvesting will reduce the cost of sugarcane production, ensure timely and reliable supplies of fresh cane to sugar mills, ensure timely harvesting for maximum yield and sugar recovery, overcome labor problems, and improve soil structure. In general, rising sugarcane cultivation costs, coupled with better remuneration from competing crops such as paddy, wheat and corn, should keep cane prices firm during the forthcoming season.

According to the second advance estimate from the Indian Ministry of Agriculture, 2011/12 sugarcane production is revised down marginally to 347.9 million tons from the previous estimate of 350 million tons. Concurrently, 2011/12 centrifugal sugar production is likely to grow to 28.8 million tons, up 553,000 tons over its last estimate, due to improved cane availability coupled with a lower-than-anticipated diversion of cane for gur production. Despite a late start in Maharashtra for crushing and an earlier than usual start (3 weeks early) in Uttar Pradesh, sugar recovery is expected to be better than 2010/11, lending support to higher sugar production in 2011/12. The recent weakening of gur prices vis-à-vis sugar (Figure-2), and relatively modest cane prices paid by sugar mills limited the diversion of sugarcane for gur production during the peak crushing season. As of March 15, 2012, 2011/12 mill sugar production is estimated at 21.2 million tons (crystal weight basis) compared to 18.6 million tons for the corresponding period of 2010/11.

[1] Henceforth, any reference for a given year (e.g. 2009/10) means marketing year (October-September); unless otherwise specified.

## **Consumption:**

Indian sugar consumption is set to rise in 2012/13 to 26.5 million tons on improved domestic supplies and strong demand from bulk consumers. Prospects of growth in the Indian economy (expected at 7.6 percent for fiscal 2012/13 and 8.6 percent for fiscal 2013/14 [1]), and a rapidly growing population (about 1.8 percent per annum) would support growth in sugar consumption. Bulk consumers such as soft drink manufacturers, bakeries, confectionary, hotel and restaurant consumers account for 60 percent of milled sugar demand. Most bulk consumers only use cane sugar as India does not produce high fructose corn syrup (HFCS) in significant quantities. In the recent 2012/13 Union Budget announcement, the Government of India (GOI) reduced the import duty on corn syrup from 30 percent to 20 percent for fiscal year 2012/13. Lowering the import duty will encourage imports of HFCS for commercial use. Local sweet shops consume most of India's Khandsari sugar. Gur is mostly consumed in rural areas for household consumption and feed use.

#### **Market Prices**

<sup>&</sup>lt;sup>[2]</sup> Sugarcane has a production cycle of 2-3 years, i.e. cane planted in a marketing year is harvested in the next marketing year, followed by one or two additional retune crop in the next one to two years. About 60-70 percent of farmers take one retune cropand the other 30-40 percent take two retune crops. The cane yield of retune crop is normally lower than that of new planted canecrop.

<sup>[3]</sup> Units are in raw value unless otherwise stated.

<sup>&</sup>lt;sup>[4]</sup> On January 17, 2012, the Supreme Court directed Uttar Pradesh mills to settle cane arrears for 2006-07 and 2007-08 within three months. The arrears are estimated close to \$195 million. Mills received an interim relief in 2007-08 to pay cane price at a rate lower by Rs 15 per quintal compared to the state advised price (SAP).

After reaching a peak in January 2010, domestic sugar prices softened on the expectation of increased domestic production in 2010/11 and forecasted higher production in 2011/12. Following the GOI's decision to allow sugar exports in 2011/12, domestic sugar prices rose strongly in November 2011, but were moderated as fresh sugar supplies pulled down prices. Current sugar prices in India's domestic wholesale market range from \$540 to \$600 per ton. Sugar prices in the upcoming 2012/13 season are expected to remain range-bound on prospects of improved domestic supplies, although international price movements can influence domestic prices. Gur prices have been under pressure (Table 6) since the beginning of 2011/12 and its price in 2012/13 will be guided by sugar price movements.

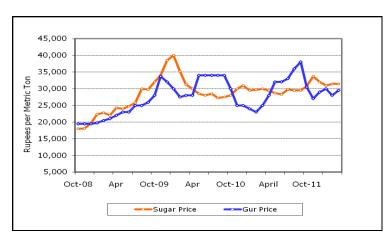


Figure 2. India: Sugar and Gur Prices in Delhi Market

Source: Industry and trade sources

[1] Economic survey of India.

#### **Trade:**

Anticipating surplus sugar production and strong export demand for 2012/13, India will be a net exporter of sugar for second consecutive year, with exports likely to reach as much as 2.5 million tons. Given surplus sugar supplies for 2011/12, the GOI has allowed 3 million tons [1] of commercial exports under Open General License. Of the total allocated quantity for exports, industry estimates 1.3 million tons of sugar will be exported through March 31, 2012.

With the recent softening of international sugar prices and India's rising domestic cost of production, Indian sugar exporters will face lower export price realization, especially in mills in northern India which face higher transport costs. However, mills in western and southern India will continue to benefit from their proximity to ports and relatively lower production costs. The current pace of exports suggests that Indian sugar exports will reach at least 2.6 million tons in 2011/12. The export estimate also includes 8,424 metric tons of sugar exports to United States under Tariff Rate Quota for fiscal year 2011/12 and re-exports of 37,857 tons of imported raw sugar stocks lying in the Chennai and Kandla ports. [2] Sugar imports in the current and forecast year are expected to be negligible.

#### Trade Policy

In order to augment domestic supplies due to concerns over rising food price inflation, the GOI took measures to relax import restrictions. The GOI extended duty-free imports of raw and white sugar through a series of notifications (GAIN IN1199) until March 2012. In the budget announcement for fiscal year 2012/13, the GOI has withdrawn the import duty on sugar (raw and white). Without further notification, the import duty on sugar will remain zero. While ensuring an adequate supply of sugar to end consumers, the GOI has also lifted stockholding limits [3] on sugar for recognized traders and wholesale dealers since December 2011.

[1] Sugar exports of 1 million tons each were announced in November 2011, February 2012 and March 2012. Sugar continues to be exported under a quota system in which the GOI allocates export quota to every mill based on its sugar production during last three years. Lately, the Ministry of Food and Public Distribution, GOI, moved a proposal to allocate sugar export quota on first-come-first serve basis. However, the proposal holds in limbo due to conflict of interest between mills in North India and South and West India. For more information on sugar export decisions by the Empowered Group of Ministers in 2011/12 can be found at the Department of Food and Public Distribution website.

[2] http://fcamin.nic.in/sugar/scan0001.jpg

#### **Stocks:**

Total 2012/13 ending stocks are forecast at 7.3 million tons, which is 750,000 tons over 2011/12 ending stocks. This is on par with normal stock levels, which is defined as India's three-month consumption requirement.

## **Policy:**

### **Sugarcane Production and Pricing Policy**

The Government of India (GOI) supports research, development, training of farmers and transfer of new varieties and improved production technologies (seed, implements, pest management) to growers in its endeavor to raise cane yields and sugar recovery rates. The Indian Council of Agricultural Research (ICAR) conducts sugarcane research and development at the national level. State agricultural universities, regional research institutions, and state agricultural extension agencies support these efforts at the regional and state levels. The central and state governments also support sugarcane growers by ensuring finances and input supplies at affordable prices. To increase the area of cultivation and production in India, a centrally sponsored scheme called the Sustainable Development Fund of Sugarcane Based Cropping System Area under the Macro Management Mode of Agriculture is being implemented in various sugarcane growing states.

The GOI establishes a minimum support price (MSP) for sugarcane on the basis of recommendations by the Commission for Agricultural Costs and Prices (CACP) and after consulting state governments and associations of the sugar industry and cane growers. In 2009, the GOI announced a new fair and remunerative price system (FRP) that links cane prices with sugar price realization by sugar mills. Several state governments further augment the MSP/FRP, typically by 30-40 percent, due to political compulsions rather than market pricing.

Sugar mills are required to pay the "state advised price (SAP)" to sugarcane farmers irrespective of the market price of sugar. Softening sugar prices, coupled with apprehensions of a large cane crop,

<sup>[3]</sup> Please refer to GAIN report IN1137 for more information on previous stock holding limits imposed by the GOI.

discouraged the sugar mills to pay higher cane prices vis-à-vis 2010/11. However, cane prices received by farmers were higher than the MSP/FRP in most of the growing states. Although the local industry has been advocating rationalization of cane pricing policy by linking it with domestic/world sugar prices, industry sources do not expect any downward revision of the FRP in the coming years given the political clout of the farmers lobby.

## **Sugar Production and Marketing Policy**

The GOI levies a fee of Rs. 240 (\$5.60) per ton of sugar produced by mills for the Sugarcane Development Fund (SDF), which is used to support research, extension, and technological improvement in the sugar sector. The SDF is also often used to support sugar buffer-stocks operations, provide a transport subsidy for sugar exports, and provide an interest subsidy on loans for the installation of power generation and ethanol production plants. In March 2008, the GOI enacted the Sugar Development Fund (Amendment) Bill, 2008, that enables the government to include the use of the fund for debt restructuring and granting soft loans to sugar mills.

The GOI follows a policy of partial market control and dual pricing for sugar. Local sugar mills are required to supply 10 percent of their production to the government as 'levy sugar' at below-market prices, which the GOI distributes through the Public Distribution System (PDS) to the below-poverty line population at subsidized rates. Mills are allowed to sell the balance of their production as 'free sugar' at market prices. However, the sale of free-sale sugar and levy sugar is administered by the GOI through periodic quotas, designed to maintain price stability in the market. Since April 2012, the GOI has reinstated the quarterly system (Table 8) of allocating sugar for open market and fair price shops, and has done away with the previous regulated mechanism for the monthly release of sugar. The GOI monitors the sales of the quota by the mills and takes penal action against the defaulter mills who are not selling their quota allocation.

#### **Ethanol Program**

India's ethanol program is based on producing ethanol from sugar molasses, a by-product of the sugar industry and not directly from sugarcane or corn as in most countries. For more on India's ethanol program, please refer to the 2011 India Bio-fuel Annual (GAIN IN1159).

## **Production, Supply and Demand Data Statistics:**

Table 1. India: Centrifugal Sugar (Raw Value Basis), in Thousand Tons

Sugar, Centrifugal	2010/2011		2011/2012		2012/2013		
India	Market Year Oct 201	U	Market Year Oct 201	O	Market Year Oct 201	O	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	

Beginning Stocks	5,204	6,223	6,059	5,799	6,529	(1000 MT)
Beet Sugar Production	0	0	0	0	0	(1000 MT)
Cane Sugar Production	26,650	26,574	28,300	28,830	29,750	(1000 MT)
Total Sugar Production	26,650	26,574	28,300	28,830	29,750	(1000 MT)
Raw Imports	402	402	0	0	0	(1000 MT)
Refined Imp.(Raw Val)	3	3	0	0	0	(1000 MT)
Total Imports	405	405	0	0	0	(1000 MT)
Total Supply	32,259	33,202	34,359	34,629	36,279	(1000 MT)
Raw Exports	700	1,187	0	0	0	(1000 MT)
Refined Exp.(Raw Val)	2,500	2,716	2,500	2,600	2,500	(1000 MT)
Total Exports	3,200	3,903	2,500	2,600	2,500	(1000 MT)
Human Dom. Consumption	23,000	23,500	25,000	25,500	26,500	(1000 MT)
Other Disappearance	0	0	0	0	0	(1000 MT)
Total Use	23,000	23,500	25,000	25,500	26,500	(1000 MT)
Ending Stocks	6,059	5,799	6,859	6,529	7,279	(1000 MT)
Total Distribution	32,259	33,202	34,359	34,629	36,279	(1000 MT)
TS=TD		0		0	0	,

**Note**: Stocks include only milled sugar, as all *khandsari* sugar produced is consumed within the marketing year. Virtually no centrifugal sugar is utilized for alcohol, feed, or other non-human consumption.

Table 2. India: Sugarcane, Centrifugal, Area in Thousand Hectares and Others in Thousand Tons

	2010/	2011	2011/	/2012	2012/	2013	
Sugar Cane for Centrifugal India		Market Year Begin: Jan 2011		Market Year Begin: Jan 2012		Market Year Begin: Jan 2013	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Planted	4,810	4,940		5,090		5,250	(1000 HA)
Area Harvested	4,810	4,940		5,090		5,250	(1000 HA)
Production	328,000	342,380		347,870		365,000	(1000 MT)
Total Supply	328,000	342,380		347,870		365,000	(1000 MT)
Utilization for Sugar	237,000	240,000		260,000		270,000	(1000 MT)
Utilizatn for Alcohol	91,000	102,380		87,870		95,000	(1000 MT)
Total Utilization	328,000	342,380		347,870		365,000	(1000 MT)
TS=TD		0		0		0	

**Note**: Virtually no cane is utilized directly for alcohol production. 'Utilization for alcohol' in the PS&D includes cane used for gur, seed, feed and waste. 'Utilization for sugar' data include cane used to produce mill sugar and khandsari sugar.

Table 3. India: Sugarcane Area, Production, and Utilization

Sugar Cane	Area <sup>/1</sup>	Yield <sup>/1</sup>	Production '1	Sugar <sup>/2</sup>	Khandsari <sup>/3</sup>	Gur /3	Seed/3
	Million ha	Tons/ha	Million Tons	Million Tons	Million Tons	Million Tons	Million Tons
1985/86	2.86	59.99	171.68	68.98	10.48	71.62	20.60
1990/91	3.69	65.39	241.05	122.32	13.18	76.63	28.93
1995/96	4.15	68.02	282.09	174.76	10.00	67.27	30.06
2000/01	4.32	68.49	295.60	176.65	11.00	72.48	35.47
2001/02	4.41	67.38	297.21	180.32	10.50	70.73	35.67
2002/03	4.52	63.58	287.38	194.33	9.50	49.07	34.49
2003/04	3.94	59.39	233.86	132.51	10.00	61.35	30.00
2004/05	3.66	64.74	237.09	124.77	9.50	74.37	28.45
2005/06	4.20	66.93	281.17	188.672	8.500	50.259	33.741
2006/07	5.15	69.03	355.52	279.249	7.500	26.109	42.662
2007/08	5.06	68.81	348.19	249.906	7.000	49.501	41.783
2008/09	4.40	64.77	285.00	145.000	6.500	99.300	34.200
2009/10	4.20	66.14	277.80	185.548	6.500	52.416	33.336
2010/11	4.94	69.25	342.38	240.00	7.50	53.80	41.08
2011/12	5.09	68.30	347.87	260.00	7.00	39.12	41.74
2012/13 /3	5.25	69.52	365.00	270.00	7.00	44.20	43.80

Note: Figures for 2011/12 and 2012/13 are FAS estimates.

Source: /1: Directorate of Economic and Statistics, Ministry of Agriculture

/2: Indian Sugar Mills Association except 2011/12 and 2012/13

/3: FAS/New Delhi estimate

Table 4. India: Mill Sugar Production by State, in 100, 000 Tons, Crystal Weight Basis

State	$2009/10^{/1}$	2010/11 <sup>/1</sup>	2011/12/2	2012/13 <sup>/2</sup>
	Final	Revised	Estimate	Forecast
Andhra Pradesh	5.2	10.1	11.0	9.0
Bihar	2.6	3.9	5.5	6.0
Gujarat	11.9	12.4	11.4	16.0
Haryana	2.5	3.9	4.2	5.0
Karnataka	25.6	36.8	36.0	37.0
Maharashtra	70.7	90.5	91.0	92.0
Punjab	1.8	3.0	3.4	4.0
Tamil Nadu	12.8	18.5	20.0	23.0
Uttar Pradesh	51.8	58.9	68.4	72.0
Others	4.4	6.0	14.5	10.0
Total	189.12	243.94	265.43	274.00

Note: Excludes khandsari sugar, as state break-up is not available.

Source: /1: MYs 2009/10 and 2010/11 - Indian Sugar Mills Association

/2: MYs 2011/12 and 2012/13 – FAS/New Delhi Estimate

Table 5. India: Centrifugal Sugar, Price Table, in Rupees per Metric Tons, Crystal Weight Basis

Year	2010	2011	2012	Percent Change
January	40000	29500	31000	5
February	35200	29650	31500	6
March	31250	30000	31500	5
April	30000	29400		
May	28500	28750		
June	28000	28300		
July	28500	29750		
August	27250	29500		
September	27500	29500		
October	28000	30750		
November	30000	33750		
December	31000	32000		
				-
Exchange Rate:	45.61	48.13	51.74	
Local Currency/US \$				

**Note:** Exchange rate for 2010 and 2011 refers to Indian Fiscal Years (IFY) 2010/11 (April/March) and IFY 2011/12 respectively. Exchange rate of 2012 refers to first the fortnight of April 2012.

Table 6. India: Gur, Price Table, in Rupees/Metric Tons, Actual Weight Basis

Year	2010	2011	2012	Percent Change
January	30000	24000	30000	25
February	27500	23000	28000	22
March	28000	25000	29500	18
April	28000	28000		
May	34000	32000		
June	34000	32000		
July	34000	33000		
August	34000	36000		
September	34000	38000		
October	30000	30500		
November	25000	27000		
December	25000	29000		
	T			_
Exchange Rate:	45.61	48.13	51.74	
Local Currency/US \$				

**Note**: Exchange rate for 2010 and 2011 refers to Indian Fiscal Years (IFY) 2010/11 (April/March) and IFY 2011/12 respectively. Exchange rate of 2012 refers to first fortnight of April 2012.

Source & Contract Term: Indian Sugar Mills Association; month-end prices in the Delhi wholesale market.

Table 7. India: Sugarcane Price Table, in Rupees per Ton

	2009/10	2010/11	2011/12					
Minimum Support Price (MSP) or Fair Remunerative Price (FRP)								
Wheat	11,000	11,200	12,850					
Rice (Grade A)	9,800	10,300	11,100					
Sugarcane	1,298.4	1,391.2	1,450.0*					
State Advised Price (SAP) for Sugar	rcane, by State							
Uttar Pradesh	1,650-1,700	2,050-2,100	2,350-2,500					
Haryana/Punjab	1,850-1,900	1,900-2,200	2,200-2,310					
Southern States <sup>/#</sup>	2,000-2,400	1,750-,300	1,800-2,050					

#### Notes:

In 2011/12, Tamil Nadu government was paying Rs 100 in addition to SAP as transport cost

Exchange rate:

2010/11 (April-March) 1 US\$ = 45.61 Indian Rupees 2011/12 (April-March) 1 US\$ = 48.13 Indian Rupees

Source: Indian Sugar Mills Association

<sup>\*:</sup> FRP for 2011/12 at 9.5 percent recovery, subject to a premium of Rs 1.53 for every 0.1 percent increase in recovery above 9.5 percent.

<sup>#:</sup> Sugar mills pay market price

Table 8. India: Release of Sugar by Month

Month	2008/09	2009/10	2010/11	2011/12
October	2.33	1.99	1.90	2.00
November	1.78	1.56	1.62	1.92
December	1.69	1.69	1.71	1.91
January	1.90	1.59	1.92	1.62
February	1.79	1.79	1.54	1.46
March	1.89	1.80	1.54	1.46
April	2.04	1.80	1.81	
May	2.04	1.92	1.76	5.06*
June	1.89	1.91	1.86	
July	1.68	1.47	1.47	
August	1.84	1.92	1.93	
Sept	2.05	1.60	1.73	
Total	22.91	21.03	20.77	15.43

Note: Quantity in million metric tons weight basis.

**Source**: Indian Sugar Mills Association.

Table 9. India: Import Trade Matrix, Centrifugal Sugar, MY 2010/11

Period	Raw Sugar	White Sugar	Total
October	83,405	1,710	85,115
November	263,825	802	264,627
December	30,000	50	30,050
January	0	66	24,846
February	0	58	58
March	0	1	1
April	0	33	33
May	0	97	97
June	0	38	38
July	1	1	2
August	0	0	0
September	0	0	0
TOTAL	402,011	2,856	404,867

Note: Quantity in metric tons. Trade figures for 2010/11 are unavailable.

 ${\bf Source:}\ Industry\ sources$ 

<sup>\*:</sup> Includes 100,000 tons of carry-over quantity of unsold non-levy sugar quota for March 2012, but does not include levy quota for June 2012. The following can be accessed from <a href="http://pib.nic.in/newsite/erelease.aspx?relid=82022">http://pib.nic.in/newsite/erelease.aspx?relid=82022</a>. Note that data collection as of June 2011 is provided on a quarterly basis.

Table 10. India: Export Trade Matrix, Centrifugal Sugar, MY 2010/11

Period	Raw Sugar	White Sugar	Total
October	18,728	241,527	260,255
November	94,568	84,188	178,756
December	223,354	432,155	655,509
January	98,859	149,944	248,803
February	144,980	452,446	597,426
March	409,914	555,393	965,307
April	59,169	92,133	151,302
May	73,270	135,746	209,016
June	49,067	243,614	292,681
July	15,480	150,923	166,403
August	0	0	0
September	0	0	0
Total	1,187,389	2,538,069	3,725,458

**Note**: Quantity in metric tons. Trade figures for 2010/11 are unavailable.

Source: Industry and Trade sources.